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THE NEW ENGLAND BOTANICAL CLUB

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THE DOCTORS JOHN BRICKELL.

B. L. Robinson.

The writer has recently been working on a revision of *Brickellia*, a genus of eupatorioid *Compositae*, abundant in the western part of our country and in the warmer parts of America, although barely entering the region covered by Gray's Manual. During this task an attempt was made to learn something of the man for whom the group was named. In the original publication, its author, Stephen Elliott, in his Sketch of the Botany of South Carolina and Georgia, ii. 290 (1822?), says "I have named it in commemoration of Dr. John Brickell, of Savannah, who at one period of his life paid much attention to the botany of this country, and made known to Dr. Muhlenberg, Fraser and others, many of its undescribed plants."

With this excellent start, giving the full name, profession, place of residence, and correspondents of the person in question, it seemed likely that such further facts as the dates of his birth and death, the extent and nature of his publications, etc., could be readily ascertained. However, in the usual sources of such information, the material found was neither extensive nor consistent.

Wittstein in his Etymologisch-botanisches Handwörterbuch, 123 (1856) says: "**Brickellia** Ell. (*Compositae*). Nach John Brickell; schrieb: The nat. hist. of North Carolina, Dublin 1837."

Dr. Gray in the Synoptical Flora, i. pt. 2, 103 (1884) cautiously confines his statement regarding the dedication of the genus to the following words: "*Dr. John Brickell* of Georgia, correspondent of Muhlenberg and Elliott."

Britten & Boulger in their Biographical Index of British and Irish

Botanists, 22 (1893), give the following: "**Brickell, John** (fl. 1730–1745). M. D. 'Nat. Hist. N. Carolina,' Dublin, 1737. Cat. American plants and trees, Dublin, 1745. Sent plants to Muhlenberg. Elliott, Bot. Carolina, ii. 290. *Brickellia* Ell."

In the Catalogue of the Library of the Arnold Arboretum, i. 111 (1914), occurs the following:

Brickell, John. Jeffersonia [New York. 1800.]
Medical repository, 1800. i. 555.
——— The natural history of North-Carolina, with an account of the trade, manners, and customs of the Christian and Indian inhabitants. Dublin. 1737. sm. 8°. pp. [4], xvi, 408. Map and 4 plates.
"Of the vegetables of North Carolina," pp. 57–106.
——— Stellandria [and] Stellandria glabra. [New York. 1803.] 8°.
Medical repository, 1803, vi, 327.

The fact that must strike anyone who attentively examines these records is that they attribute to Dr. John Brickell an extraordinarily long period of activity. It is true the date 1837 given by Wittstein is merely a clerical or typographical error, for the Natural History of North Carolina by Brickell was published a hundred years earlier. It passed through several editions, or rather reprints, one in 1737, one, it is said, in 1739, another in 1743, and according to Watt in the Bibliotheca Britannica and to Allibone in his Critical Dictionary of English Literature, i. 244, the earliest in 1723. However, a man who could prepare for publication such a work even as early as 1737 (not to mention 1723 — a date open to suspicion of error) was certainly not likely to be writing for the Medical Repository in 1803. Nor would a man who, according to Britten & Boulger, flourished in 1730–45, be likely to have been a correspondent of Muhlenberg and Stephen Elliott, who "flourished" at least a generation later.

Suspecting that two men of the same name and profession, though of very different epochs, had been confused by the authors quoted, the writer made such search for precise records as time and opportunity permitted. It soon became clear that the Dr. John Brickell of Savannah in the time of Elliott was a physician and botanist of more than local reputation, who was among the original subscribers to the Medical Repository and who contributed to that journal the following articles:

1) A communication of three paragraphs, hexade 1, vol. i. 573 (1798), describing as a new genus, under the name of *Jeffersonia*, the yellow jasmine of the southern states, apparently without knowledge

of the earlier description of the same plant as *Gelsemium*. The article is prefaced by the editorial note: "*The following article is from a letter, just received, from Dr. Brickell, of Savannah, whose Botanical Communications we shall always be happy to admit.*"

2) Theory of Puerperal Fever. Hex. 1, ii. 15–17 (1799).

3) Botanical Intelligence from Dr. Brickell, of Savannah, in the State of Georgia, addressed to the Editors. Hex. 1, vi. 327–8 (1803). In this paper Brickell describes under the name *Stellandria Glabra* the plant which appeared during the same year in Michaux's Flora, ii. 219, as *Schisandra coccinea*. Brickell also mentions a new species of *Samolus*, and states that *Kuhnia* occurs with distinct anthers — an observation acute for the period. At one point in his article he refers to "my friend Mr. Stephen Elliott."

4) Effects of Alkalies on Poisons. Hex. 2, ii. 441–2 (1805).

5) Sketches relative to the Natural History of the Blood and a Theory of Gout, communicated by John Brickell, M. D. of Savannah, to Dr. Mitchill. Hex. 2, vi. 45 (1809).

Muhlenberg in his Catalogue, on page iv. of the preface (1813), gives a list of friends and correspondents who had assisted him by communicating specimens or seeds. Among these appears "Brickell, (John) M. D. from Georgia, deceased."

It therefore became clear that the Dr. John Brickell in question wrote articles from 1798 to 1809 and had died before 1813.

Records, perhaps wholly unconnected with our subject, were found showing that there was a student of the name John Brickell at Columbia College in 1774 and that a John Brickell was recommended for an appointment in the United States army in 1782.

From the facts here assembled it seemed clear that the Dr. John Brickell in question was of a later generation than the man of the same name who wrote in the first half of the 18th century the Natural History of North Carolina. However, no precise information being available as to the dates of birth or death or regarding possible relationship of these two men, the problem was turned over to Miss Mary A. Day, the experienced librarian of the Gray Herbarium. Dr. George E. Richards of Boston also very kindly made search at the Boston Medical Library. Finally, in reply to a letter of inquiry addressed by Miss Day to the Georgia Historical Society, an organization with headquarters in Savannah, the following highly satisfactory letter was received.

Savannah, Ga., 23d September, 1916.

Miss Mary A. Day, Librarian Gray Herbarium,

Cambridge, Mass.

Dear Miss Day:—

I take great pleasure in giving you the following information in reply to yours of the 20th concerning Dr. John Brickell, but regret that I cannot give more.

Dr. Brickell died in the year 1809, and the day after his death the following notice appeared in the only newspaper published here:

From *The Republican and Savannah Evening Ledger*, Saturday, Dec. 23, 1809.

"Died, on Friday evening, 22d instant, doctor JOHN BRICKELL, aged sixty years.

"Dr. Brickell was a native of the county of Lowth (Ireland) and had been forty years in America, thirty of which he spent in Georgia. He was an excellent classic scholar, an ingenious naturalist, and a sincere patriot, having evinced a fervent attachment to the honor and welfare of the United States. In a country peculiarly favorable to botanical researches, Dr. B. (as this was among his favorite studies) had distinguished himself by unwearied application, and the many communications he received from the learned of various climes proved him to have been successful in his pursuit.

"As a politician, he always ranked among the firmest and most incorruptible adherents to the whig administrations of this country, and often mourned the misfortunes of that one he had left; and will long be regretted as a friend to the rights and liberties of the world, as an elegant and accomplished scholar, and as an honest man."

Dr. Brickell left a will which I have read today. It is dated Dec. 5, 1809, and was probated Jan'y 2, 1810. It opens with the statement that he was "weak in body." It is a short paper, and by it he left the whole of his estate to his "brother (now with me) James Brickell." Among the papers filed with the will is a single sheet containing only these words: "The whole of the estate of Doctor John Brickell was left in the possession of his brother James Brickell who disposed of the whole, the lot to Mr. Archibald S. Bulloch, and the negroes to different persons. The furniture, &c., was sold at his instance at public auction by Minis & Henry"

Filed 21 May, 1811. (Signed) Rich. Leake.
(One of the Executors).

There is no other name in the will besides the brother James.
I am glad to give you the foregoing, but fear it will be of little use to you.

Very truly yours,

Wm. Harden,
Librarian.

Thus, thanks to the kind interest of Mr. Harden and his skill in searching out old records, the matter in hand can now be cleared up. It is evident that in nearly all references to the dedication of the genus *Brickellia* two men of identical name were confused, both being presumably from the east of Ireland, both belonging to the same profession, both having biological interests, and both being authors of papers relating to phases of natural history.

It is easy to infer that John Brickell of Georgia, the friend of Muhlenberg and Elliott, may have been the son or grandson of the earlier John Brickell of North Carolina, but no evidence on this matter has come to hand.

It may be mentioned that even before Elliott dedicated his genus *Brickellia* to his friend Brickell, Rafinesque had used the name *Brickellia* in one of those hurried, careless, and in no way justified changes of name so frequent in his works. Thus in the Medical Repository, hex. 2, ii. 352–3 (1808) Rafinesque characteristically writes "Having found in the Flora Boreali-Americana of Michaux, many new genusses, which had already been published under other names by different authors, or to which unappropriate names were given against the usual botanical rules, I shall rectify those errors; in the former case annulling Michaux's names and adopting the former ones, such as * * *

While, in the latter I shall create new names more appropriated, and I shall call * * *

Brickellia, the sponcopsis of do. [Michaux]."

By *sponcopsis* [1] it has been generally inferred that Rafinesque meant *Ipomopsis*, a name employed by Michaux for the plant now called *Gilia rubra* (L.) Heller. Rafinesque clearly had no right to change the name used by Michaux and his *Brickellia* has no validity under any code, even in the unlikely contingency that this particular section of *Gilia* should regain generic standing. Our interest in the matter at present lies solely in the circumstance that it was an attempt to give recognition to the same Dr. John Brickell for whom Elliott later named the now well known genus *Brickellia* of the *Compositae*. It is true, Rafinesque made no explanation of his *Brickellia*, but that very fact would indicate that it was given in honor of a man then prominent, and it is to be noticed that it was published in the Medical Repository, a journal to which Brickell was at that period a not infrequent contributor, a fact which probably led Rafinesque to assume that explanation as to his identity would have been superfluous.

Regarding the earlier Dr. John Brickell little is known. His Natural History of North Carolina, now a work of rarity, prized by collectors of early Americana, was drawn largely, though without acknowledgement, from an earlier History of Carolina, by John

[1] This misprinted name has received still further distortion by Reichenbach, who in his Conspectus Regni Vegetabilis 212[e] (1828) cites it as *Spogopsis*, a spelling which is copied by Pfeiffer in his usually very accurate Nomenclator, i. 467 (1873).

Lawson (London, 1709, 1714, 1718), and has been variously estimated. Thus, Jared Sparks (North American Review, xxiii. 288, Oct., 1826) remarks concerning it "a more daring piece of plagiarism was never executed," while J. Bryan Grimes, in a prefatory note accompanying a facsimile reprint issued by authority of the Trustees of the [North Carolina] Public Libraries in 1911, calls attention to the fact that although largely based upon the earlier work of Lawson, Brickell's Natural History is expanded to nearly twice the length and contains, especially on the medical side, much original matter.

According to Grimes, in the prefatory note above mentioned, Dr. John Brickell and his brother the Rev. Matthias Brickell came to Carolina with Gov. Burrington. John settled at Edenton. He was on the grand jury of the whole province in 1731, and, being appointed about that time a member of a mission to the Cherokee Indians, took part in an expedition to the interior which is thought to have penetrated well into what is now Tennessee. Soon after this journey he returned to England and his subsequent life is wholly unknown. Besides his Natural History he wrote a Catalogue of American Trees and Plants which will bear the Climate of England. According to Allibone (l. c.) this was a folio published in London in 1739. However, Britten & Boulger give the place of publication as Dublin and the date as 1745, which would indicate that this work also passed through more than one edition.

To differentiate, by way of summary, the two men who have been so generally confused, they were as follows:

1) An earlier Dr. John Brickell, who settled at Edenton, North Carolina, in the earlier half of the 18th century, author of a somewhat grotesque and largely compiled Natural History of North Carolina, published (according to Allibone) in 1723, with better known editions in 1737, 1739, and 1743; also a Catalogue of American Trees and Plants which will bear the Climate of England, published in London, 1739, and in Dublin, 1745.

2) A later Dr. John Brickell, born in County Louth, Ireland, in or about 1749, for thirty years resident in Savannah, Georgia, where he died 22 December, 1809, an acute observer of the local vegetation, a man highly respected, author of several medical and botanical communications to the then prominent Medical Repository of New York, a friend of Muhlenberg, Fraser, and of Elliott, who dedicated to him the composite genus *Brickellia*.

GRAY HERBARIUM.

NOTES ON GRAMINEAE,—I.

F. Tracy Hubbard.

In the past two years' study certain necessary changes in the nomenclature of the Gramineae of the seventh edition of Gray's Manual have been noted and furthermore in collections which have been examined certain additions to the Manual have appeared. With a view to calling these facts to the attention of the Manual users this paper has been prepared.

Holcus halepensis L. Sp. Pl. **2**: 1047 (1753). *Sorghum halepense* (L.) Pers. Syn. **1**: 101 (1805); Hitchc. in Gray Man. ed. 7, 95 (1908). *Andropogon halepensis* (L.) Brot. Fl. Lusit. **1**: 89 (1806).— As pointed out by Hitchcock in Jepson Fl. Calif. 126 (1912) *Holcus* L. should be used for the species which recent authors have called Sorghum rather than those for which they have retained the name. While not accepting the type-species reason as a basis for this change, I have reached the same conclusion by studying the description of Holcus as given by Linnaeus Gen. Pl. ed. 5 469 (1754) which I believe applies to *H. Sorghum* and its allies and really excludes *H. lanatus* and its allies. This conclusion is strengthened by Linnaeus's generic synonym, *Sorghum*, Mich.

Digitaria Ischaemum Schreb. ex Muhl. Descr. Gram. 131 (1817). *Panicum lineare* Krock. Fl. Siles. **1**: 95 (1787) non L. *P. Ischaemum* Schreb. ex Schweigg. Spec. Fl. Erlang. 16 (1804). *D. humifusa* Pers. Syn. **1**: 85 (1805); Hitchc. in Gray Man. ed. 7, 95 (1908). *P. glabrum* Gaud. Agrost. Helv. **1**: 22 (1811). *D. glabra* (Gaud.) Beauv. Agrost. 51, 169 (1812). *D. linearis* (Krock.) Rostaf. in Verh. Zool.-Bot. Ges. Wien. **22**: 99 (1872) non Pers. *Syntherisma linearis* (Krock.) Nash in Bull. Torr. Bot. Cl. **22**: 420 (1895). *S. humifusum* (Pers.) Rydb. in Mem. N. Y. Bot. Gard. **1**: 469 (1900). *S. Ischaemum* (Schreb.) Nash in No. Am. Fl. **17**: 151 (1912).

Although there is no specimen of *D. Ischaemum* in the Muhlenberg herbarium [according to the list of grasses given by Scribner and Merrill in Circ. U. S. Div. Agrost. **27** (1900)] there seems little question of the identity of his species. In the first place Muhlenberg cites Schreber as the authority of his plant and Schreber was a friend of his so that he was probably in correspondence with him and probably *D. Ischaemum* is based on *Panicum Ischaemum* which is unquestionably the same as *D. humifusa*. Moreover although, in most respects, Muhlenberg's description is broad enough to apply to both *D. sanguinalis* and *D. humifusa*, "nodis glabris" and "Vaginis striatis glabris purpurascentibus" certainly answer to the latter and not to the former.

Furthermore Muhlenberg, in the same work, has descriptions of both *D. sanguinalis* and *D. filiformis*, the only other species which his description could apply to, so that all told it seems probable that he was describing the plant we have known as *D. humifusa*. Consequently I am accepting Schreber ex Muhlenberg as the authority for *D. Ischaemum* which is without question the correct specific combination for the plant recently treated as *D. humifusa*.

ECHINOCHLOA CRUSGALLI (L.) Beauv. forma **vittata** forma nov.— Differt a typo foliis inter nervos virides flavo-viridibus. NEW BRUNSWICK: Shediac Cape, August 19, 1916, house yard, *F. Tracy Hubbard*, no. 763 (TYPE, in Herb. Hubb.). MASSACHUSETTS: Stoughton, September 15, 1912, waste ground, in yard, *S. F. Blake*, no. 4639.

This plant is at once noticeable on account of its almost golden leaves veined with rather dark green. Otherwise it seems to show no variation from the type.

SETARIA **lutescens** (Weigel) comb. nov. *Panicum glaucum* Auct. non L. *P. lutescens* Weigel Obs. 20 (1772). *S. glauca* Auct. as to plant. *Chaetochloa lutescens* (Weigel) Stuntz in U. S. Bur. Pl. Ind. Inv. Seeds & Pl. Imp. **31**: 36, 86 (1914).— As pointed out by Stuntz in the above mentioned article *Panicum glaucum* L. should be applied to the pearl millet which has been called *Pennisetum americanum* (L.) K. Schum., but now becomes *Penn. glaucum* (L.) R. Br. The oldest available name for the plant known as *S. glaucum* is *Panicum lutescens* Weigel, consequently the correct name of our plant is *S. lutescens*. *S. glauca* (L.) Beauv. and *Chaetochloa glauca* (L.) Scribn. are typonyms of Pennisetum glaucum.

SETARIA VIRIDIS (L.) Beauv. var. WEINMANNII (R. & S.) Brand in Koch Syn. Deutsch. Fl. ed. 3, **3**: 2690 (1905); Fernald & Wiegand in RHODORA **12**: 133 (1910). *S. viridis* var. *breviseta* (Doell.) Hitchc. in RHODORA **8**: 210 (1906); Hitchc. in Gray Man. ed. 7, 119 (1908).— As pointed out in Am. Journ. Bot. **2**: 181 (1915) it seems undesirable to separate var. *breviseta* from var. *Weinmannii* and as the latter is the earliest varietal name which we can apply with certainty to this form it replaces var. *breviseta*.

SETARIA ITALICA (L.) Beauv. [sensu amplissimo] Agrost. 51, 170, 178 (1812).— This species is most readily distinguished from *S. viridis* by the fact that the spikelet in the latter is articulate below the glooms; the complete spikelet shelling out leaving a cup-like receptacle whereas *S. italica* has the spikelet articulate above the glooms; the fruit only shelling out leaving the glumes and sterile lemma behind. For a complete treatment of *S. italica* and variations see Am. Journ. Bot. **2**: 183–196 (1915) of which variations the following have so far been noted within the Manual range: subsp. STRAMINEOFRUCTA Hubb.[1] and its forma BREVISETA (Doell) Hubb. [Golden Wonder Millet, treated in the Manual as var. *germanica*]; subsp. STRAMINEOFRUCTA

[1] These combinations were all made in Am. Journ. Bot. **2**: 183–196 (1915).

subvar. GERMANICA (Mill.) Hubb. with its forma MITIS (Alef.) Hubb.; subsp. STRAMINEOFRUCTA var. HOSTII Hubb. and its subvar. METZGERI (Körnicke) Hubb. and subsp. STRAMINEOFRUCTA var. BRUNNEOSETA subvar. DENSIOR Hubb.

ORYZOPSIS CANADENSIS (Poir.) Torr. ex Gray Man. 583 (1848) as to name bringing synonym not as to plant.[1] *Stipa canadensis* Poir. in Lam. Encycl. **7**: 452 (1806); Hitchc. in Gray Man. ed. 7, 123 (1908) — Some time ago Prof. Hitchcock pointed out to me that *Stipa canadensis* was in reality an *Oryzopsis*.

MUHLENBERGIA SQUARROSA (Trin.) Rydb. in Bull. Torr. Bot. Cl. **36**: 531 (1909). *Vilfa squarrosa* Trin. in Mem. Acad. St. Petersb. Ser. 4, Sci. Nat. **5**[2]: 100 [separate 73] (1840). *V. Richardsonis* Trin. l. c. Ser. 4, Sci. Nat. **5**[2]: 103 [separate 81] (1840). *V. depauperata* Torr. ex Hook. Fl. Bor. Am. **2**: 257 (1840) not *M. depauperata* Scribn. in Bot. Gaz. **9**: 187 (1884). *M. aspericaulis* Nees ex Steud. Nom. ed. 2, **2**: 164 (1840) nomen. *Sporobolus depauperatus* (Torr.) Scribn. in Bull. Torr. Bot. Cl. **10**: 63 (1883). *S. Richardsonis* (Richardsonii) (Trin.) Merr. in RHODORA **4**: 46 (1902); Hitchc. in Gray Man. ed. 7, 130 (1908). *M. Richardsonis* (Trin.) Rydb. in Bull. Torr. Bot. Cl. **32**: 600 (1905).

Careful study of the genera *Sporobolus*, *Muhlenbergia* and *Epicampes* has led me to agree with the conclusion of Rydberg and others that the whole of the group of *Sporobolus* to which *S. Richardsonis* and *S. brevifolius* belong is more correctly placed in *Muhlenbergia* than in *Sporobolus*. Furthermore I can find no specific differences between *M. squarrosa* and *M. Richardsonis* and as *Vilfa squarrosa* has priority of place in Trinius's paper I take squarrosa as the name of the collective species that the same name may be used under both codes.

MUHLENBERGIA CUSPIDATA (Torr.) Rydb. in Bull. Torr. Bot. Cl. **32**: 599 (1905). *Agrostis brevifolia* Nutt. Gen. No. Am. Pl. **1**: 44 (1818) not *M. brevifolia* Scribn. ex Beal Grasses No. Am. **2**: 254 (1896). *Sporobolus cuspidatus* (cuspidata) (Torr.) Wood Sedges & Grasses Atlant. Div. U. S. 385 (1871); Scribn. in Bull. Torr. Bot. Cl. **10**: 63 (1883). *S. brevifolius* (Nutt.) Scribn. in Mem. Torr. Bot. Cl. **5**: 39 (1894); Hitchc. in Gray Man. ed. 7, 130 (1908).

As there is a valid *M. brevifolia* Scribn. ex Beal *S. brevifolius* when transferred to *Muhlenbergia* must become *M. cuspidata*.

GINANNIA Bub. Fl. Pyr. **4**: 321 (1901) non Scop. nec F. G. Dietr. nec Montagne nec M. Roem. *Holcus* Auct. non L. *Homalachna* (Benth. & Hook. f.) Post & Ktze. Lex. Gen. Phan. 285 (1903) in part. *Notholcus* Nash ex Hitchc. in Jepson Fl. Calif. 126 (1912).— As stated above *Holcus* is reapplied to the Sorghum group leaving the *Holcus* of authors in need of a name. The oldest generic name, aside from Holcus is *Ginannia* Bub. which according to the American Code is inadmissible

[1] The plant treated is *O. pungens* (Torr.) Hitch.

as there are four older uses of the name. However as all four are reduced to synonymy this allows *Ginannia* Bub. to be retained according to the International Rules — *Ginannia* Scop. Introd. 300 (1777) equals *Palovea* ("Palone") Aubl. Hist. Pl. Guiane **1**: 365 (1775). *Ginannia* F. G. Dietr. Vollst. Lex. Gaetrn. **4**: 357 (1800) equals *Gilibertia* Ruiz & Pav. Fl. Peruv. et Chil. Prodr. 50 (1794). *Ginnania* Montagne in Webb & Berth. Phytogr. Canad. **4**: 162 in adnot. (1840) a genus of Algae is a synonym of *Scinaia* Biv. Scinaia (1822). *Ginnania* M. Roem. Synops Monogr. **1**: 79, 90 (1846) is a synonym of *Turraea* L. Mant. Alt. 150 (1771).

Ginannia **lanata** (L.) comb. nov. *Holcus lanatus* L. Sp. Pl. **2**: 1048 (1753). *G. pubescens* Bub. l. c. 321 (1901). *Notholcus lanatus* (L.) Nash ex Hitchc. in Jepson l. c. 126 (1912).

Sphenopholis pennsylvanica (L.) Hitchc. in Am. Journ. Bot. **2**: 304 (1915). *Avena pennsylvanica* L. Sp. Pl. **1**: 79 (1753). *A. palustris* Michx. Fl. Bor. Am. **1**: 72 (1803). *Trisetum pennsylvanicum* (L.). Beauv. Agrost 154 (index) (1812) [the comb. is not made]; ex R. & S. Syst. **2**: 658 (1817). *T. palustris* (Michx.) Torr. Fl. No. & Mid. U. S. **1**: 126 (1824). *T. ludovicianum* Vasey in Bull. Torr. Bot. Cl. **12**: 6 (1885). *S. palustris* (Michx.) Scribn. in Rhodora **8**: 145 (1906); Hitchc. in Gray Man. ed. 7, 139 (1908.) — As pointed out by Hitchcock in Am. Journ. Bot. **2**: 304 (1915) the specimen of Avena pennsylvanica in the Linnean Herbarium is identical with the species that has been called *S. palustris* and consequently as the older specific name must replace palustris.

Var. **flexuosa** (Scribn.) comb. nov. *S. palustris* var. *flexuosa* Scribn. in Rhodora **8**: 145 (1906); Hitchc. in Gray Man. ed. 7, 139 (1908).— As the specific combination has been altered a new combination is required in transferring the variety.

Arrhenatherum elatius (L.) Beauv. var. **nodosum** (Reichb.) comb nov. *Gramen bulbosum nodosum* Lobel Icon. Stirp. Pl. 23 (1591). *Gramen nodosum, avenacea panicula* C. Bauhin Pinax 2 (1623); C. Bauhin Theatr. Bot. 18, fig. (1658); Scheuchzer Agrost. 237, t. 4, f. 27 & 28 (1719). *Gramen avenaceum gemmea radice seu nodosa minor* Morison Hist. **3**, Sect. 8, p. 214, t. 7, f. 38 (1715). *Avena paniculo nutante, calycibus bifloris, altero flosculo aristato* Royen Fl. Leyd. Prodr. 66 (1740). *Avena elatior* β. L. Sp. Pl. **1**: 79 (1753). *Avena tuberosa* Gilib. Exercit. **2**: 538 (1792). *Av. precatoria* Thuill. Fl. Par. ed. 2, 58 (1799). *Av. bulbosa* Willd. in Ges. Naturf. Fr. Berl. Neue Schr. **2**: 116 (1799). *Holcus bulbosus* (Willd.) Schrad. Fl. Germ. **1**: 248 (1806). *Arrhen. precatorium* (Thuill.) Beauv. Agrost. 56, 152, 154 (1812). *Arrhen. bulbosum* (Willd.) Presl Cyp. & Gram. Sic. 29 (1820). *Arrhen. avenaceum* var. β *nodosum* Reichb. Icon. Bot. Pl. Crit. Cent. **11**: [Agrost. Germ.] 45, t. 104, f. 1717 (1834); Reichb. Icon. Fl. Germ. et Helv. **1**: [Agrost. Germ. ed. 2] 19, t. 104, f. 1717 (1850). *Arrhen avenaceum* * *nodosum* Kirschl. Prodr. Fl. Alsac. 210 (1836). *Av. elatior* b. *nodosa* (Reichb.) Mutel Fl. Fr. **4**: 65 (1837). *Arrhen.*

elatius β *bulbosum* (Willd.) Koch Syn. Fl. Germ. et. Helv. 793 (1837). *Holcus avenaceus* var. β. *nodosus* (Reichb.) Vis. Fl. Dalmat. **1**: 47 (1842). *Arrhen. nodosum* (Reichb.) Kirschl. Fl. Alsac. **2**: 313 (1857). *Av. elatior* d) *tuberosa* (Gilib.) Aschers. Fl. Prov. Brandenb. **1**: 826 (1864), *Av. elatior* B. *tuberosa* (Gilib.) Aschers. & Graebn. Syn. Mitteleur. Fl. **2**[1]: 231 (1899). *Arrhen. elatius* β *tuberosum* (Gilib.) Halácsy Consp. Fl. Graec. **3**: 375 (1904).

Readily distinguished from the type by the nodulose corms at the base of the culm. This plant was mentioned in Rhodora **13**: 9 & 207, t. 85 (1911) and specimens of it were mentioned from Virginia. Massachusetts: Plymouth, June 22, 1912, dump, *S. F. Blake,* no. 3854. The earliest varietal name is nodosum and this should replace the current tuberosum.

Forma **striatum** nom nov. *Arrhen bulbosum variegatum* Hort. cf. Hitchc. in Bail. Stand. Cycl. Hort. **1**: 397 (1914).— Differt a typo varietatis foliis albo-striatis. Massachusetts: Plymouth, June 22, 1912, dump, *S. F. Blake,* no. 3855.— This form is quite clearly separated from the normal form of the variety by the white-striated leaves.

Eragrostis cilianensis (All.) Link ex Viguolo-Lutati in Malpighia **18**: 386 (1904). *Briza Eragrostis* L. Sp. Pl. **1**: 70 (1753). *Poa multiflora* Forsk. Fl. Aegypt.-Arab. 21 (1775) non *E. multiflora* (Roxb.) Trin. in Mem. Acad. St. Petersb. **6**[1]: 401 (1830). *P. cilianensis* All. Fl. Pedem. **2**: 246, t. 91, f. 2 (1785). *P. Eragrostis* Cav. Icon. **1**: 63, t. 92 (1791) non L. *B. oblonga* Moench Meth. 185 (1794). *P. megastachya* Koel. Gram. 181 (1802). *E. major* Host Gram. Austr. **4**: 14, t. 24 (1809). *E. megastachya* (Koel.) Link Hort. Berol. **1**: 187 (1821); Hitchc. in Gray May. ed. 7, 150 (1908).— As pointed out in Philipp. Journ. Sci. Bot. **8**: 159 (1913) the oldest valid name for the species called *Eragrostris megastachya* is *E. cilianensis.*

Poa palustris L. Syst. Nat. ed. 10, **2**: 874 (1759); Roth. Tent. Fl. Germ. **1**: 43 (1788); **2**[1]: 117 (1789). *P. serotina* Ehrh. Beitr. **6**: 83 (1791) nomen. *P. triflora* Gilib. Exercit. **2**: 531 (1792); Hitchc. in Gray Man. ed. 7, 156 (1908). *P. riparia* Wolff in Hoffm. Deutschl. Fl. **1**: 42 (1800). *P. fertilis* Host Gram. Austr. **3**: 10, t. 14 (1805). *P. hydrophila* Pers. Syn. **1**: 89 (1805). *P. effusa* Kit. in Schult. Oesterr. Fl. ed. 2, **1**: 227 (1814). *P. angustifolia* Wahlenb. Fl. Ups. 34 (1820) non L. *P. adspersa* Drejer Fl. Excurs. Hafn. 35 (1838).— As pointed out by Ascherson and Graebner Syn. Mitteleur. Fl. **2**[1]: 416 (1900) *Poa palustris* L. is unquestionably the same as the plant called *P. triflora* in spite of Linnaeus's false synonymy. This view is strengthened by the fact that the plant was well characterized under the Linnean name by Roth Tent. Fl. Germ. **2**[1]: 117 (1789) which antedates all other names applied to the species. This name is accepted by the more recent European botanists.

Festuca capillata Lam. Fl. Fr. **3**: 597 (1778). *F. tenuifolia* Sibth. Fl. Oxon. 44 (1794). *F. paludosa* Gaud. Agrost. Helv. **1**: 229 (1811). *Poa capillata* (Lam.) Merat Nouv. Fl. Env. Par. 38 (1812). *F. mutica*

Wulf. Fl. Norica Phan. ed. Fenzl & Graf. 145 (1858). *F. ovina* subsp. *eu-ovina* var. *capillata* (Lam.) Hack. Monogr. Fest. 85 (1882); Hitchc. in Gray Man. ed. 7, 162 (1908).— Field and herbarium study convince me that this is a clearly defined species rather than a variety of *F. ovina*. The principal characters which distinguish it from *F. ovina* are the capillary, usually longer and flexuous leaves, the smaller spikelets with awnless lemmas and the later date of flowering; in some cases as much as two weeks later than that of *F. ovina*.

Cambridge, Massachusetts.

SOME ALLIES OF ANTENNARIA ALPINA FROM NEWFOUNDLAND AND THE LABRADOR PENINSULA.

M. L. Fernald.

Antennaria **cana** (Fernald & Wiegand), n. comb. *A. alpina*, var. *cana* Fernald & Wiegand, Rhodora xiii. 24 (1911), in part. Planta humifusa, stolonibus foliosis confertis perbrevibus (ad 2 cm. longis); foliis basilaribus anguste cuneato-obovatis vel late oblanceolatis obtusis nec mucronatis basi latis 3–11 mm. longis 2–5 mm. latis supra albidis, tomento denso minuto; caule florifero 2.5–12 cm. alto gracile; foliis caulinis 9–15 subapproximatis linearibus, imis 8–15 mm. longis 1–2 mm. latis apice subulato, superioribus 5–8 mm. longis 0.5–1 mm. latis apice scarioso lanceolato; capitulis femineis (1–) 2–6 campanulatis corymbosis, pedicellis ad 1 cm. longis: involucro 5–7 mm. alto basi lanato; bracteis 3-seriatis subaequalibus tenuissimis, exterioribus oblongis obtusis brunneis, interioribus lanceolatis fulvis leviter fimbriatis; foveis receptaculi maturi denudati 60–100 0.1 mm. latis quam jugis separantibus acutis multo latioribus.

Humifuse, the crowded leafy stolons very short (up to 2 cm. long): rosette-leaves narrowly cuneate-obovate or broadly oblanceolate, obtuse, not mucronate, broad-based, 3–11 mm. long, 2–5 mm. broad, white above with dense minute tomentum: flowering stem 2.5–12 dm. high, slender: cauline leaves 9–15, rather crowded, linear, the lower 8–15 mm. long, 1–2 mm. broad, subulate-tipped; the upper 5–8 mm. long, 0.5 1 mm. wide, with a lanceolate scarious tip: pistillate heads (1–) 2–6, campanulate, corymbose, on pedicels up to 1 cm. long: involucre 5–7 mm. high, lanate at base: bracts 3-seriate, subequal, very thin, the outer oblong, brown; the inner lanceolate, tawny, slightly fimbriate: pits of the mature denuded receptacle 60–100,

0.1 mm. broad, much broader than the acute intermediate ridges.— NEWFOUNDLAND: limestone barrens near sea-level, Pointe Riche, August 4, 1910, *Fernald & Wiegand*, no. 4,139 (TYPE of *A. alpina*, var. *cana*, in Gray Herb.); dry limestone barrens, upper slopes and tablelands, altitude 200–300 m., Table Mountain, Port à Port Bay, August 16, 1910, *Fernald & Wiegand*, no. 4,141, July 16 & 17, 1914, *Fernald & St. John* in *Plantae Exsiccatae Grayanae*.

When *A. alpina*, var. *cana* was published no clear characters were recognized by which to distinguish it specifically from *A. alpina* (L.) Gaertn. and specimens with canescent foliage were cited from Norway, Greenland, Labrador and Newfoundland. The recent collection of material, consisting of several hundred individuals, brought back from Table Mountain by Mr. St. John and the writer is so consistent in its characters and so different in some important points from *A. alpina* that a more detailed study of the group has been undertaken. *A. alpina* of northern Europe and Greenland and its var. *canescens* Lange, Fl. Dan. xvi. (fasc. xlvii), 9, t. 2786 (1869) — overlooked when var. *cana* was published — have the oblanceolate rosette-leaves terminated by a distinct short mucro, but in all the Newfoundland material the shorter more cuneate-obovate leaves are blunt. In *A. alpina* and var. *canescens* the denuded mature receptacle exhibits only 20–30 large pits 0.3–0.4 mm. broad, but in the Newfoundland plant, *A. cana*, the pits are very numerous (60–100) and much smaller, about 0.1 mm. broad. In *A. alpina* the cauline leaves are larger, the lower often 2 cm. long by 3 mm. wide, and commonly fewer (4–9). It seems wiser, therefore, to treat the plant of the Newfoundland limestones as a distinct species.

The specimens from Norway and Greenland, and two of those from Labrador originally cited under *A. alpina*, var. *cana* belong, apparently, to *A. alpina*, var. *canescens* Lange. But one of the Labrador plants so far departs from *A. alpina*, on the one hand, and *A. cana*, on the other, as to seem specifically separate from both. In this plant, collected by Mr. Sornborger at Rama, the rosette-leaves are like those of *A. alpina*, var. *canescens*, but the flowering stems, instead of being flexuous as in *A. alpina* and in *A. cana*, are stiffly erect, with crowded leaves; and the receptacle of the Rama plant resembles that of *A. cana* in its numerous tiny pits, but the intermediate ridges, instead of being acute, are rounded and as broad as the pits. This plant seems heretofore to have been unrecognized and it may be called

ANTENNARIA **Sornborgeri**. Planta humifusa ramis prostratis subligneis 1 dm. longis, stolonibus confertis perbrevibus; foliis basilaribus

oblanceolatis 6–12 mm. longis 1.5–2 mm. latis ad apicem angustatis breviter mucronatis canescento-pannosis; caule florifero rigido erecto 0.4–11 dm. alto; foliis caulinis 9–12 approximatis linearibus 5–15 mm. longis 0.5–1.5 mm. latis, superioribus cum apice scarioso lanceolato villoso munitis; capitulis femineis 1–3 sessilibus campanulatis; involucro 6–7 mm. alto basi lanato; bracteis 3-seriatis subaequalibus, exterioribus lanceolatis brunneis, interioribus lineari-attenuatis fulvis, eroso-serrulatis; foveis receptaculi denudati 60–100 0.1 mm. latis juga obtusa separantia latitudine subaequantibus.

Humifuse, with trailing subligneous branches 1 dm. long: stolons very short and crowded: rosette-leaves oblanceolate, 6–12 mm. long, 1.5–2 mm. wide, narrowed at summit to the short-mucronate tip, canescent-pannose: flowering stem stiffly erect, 0.4–1.1 dm. high: cauline leaves rather crowded, 9–12, linear, 5–15 mm. long, 0.5–1.5 mm. wide; the upper with villous lanceolate scarious tips: pistillate heads 1–3, sessile, campanulate: involucre 6–7 mm. high, lanate at base: bracts about 3-seriate, unequal; the outer lanceolate, brown; the inner linear-attenuate, yellowish-brown, erose-serrulate: pits of the denuded receptacle 60–100, 0.1 mm. broad, about as wide as the blunt-edged intermediate ridges.— Labrador: Rama, August 20–24, 1897, *J. D. Sornborger*, no. 156 (type in Gray Herb.).

Antennaria alpina (L.) Gaertn., var. **ungavensis**, n. var., a forma typica recedit caulibus floriferis elongatis 2–2.3 dm. altis; foliis caulinis 9–13; capitulis 1–2, inferiore pedicello 1–1.5 cm. longo.— Ungava: Stillwater River, August 12, 1896, *Spreadborough*, Geol. Surv. Can. no. 44,442 (type in Gray Herb.).

The material was distributed as *A. labradorica* Nutt. but it seems highly improbable that it is that problematical species. In all its technical points, glabrous oblanceolate mucronate rosette-leaves, the oblong glabrous appendages of the upper cauline leaves, the involucre, and the pits of the receptacle, in no way departing from typical *A. alpina* as understood by the writer, but noteworthy for its very tall stature, numerous cauline leaves, and the long-pediceled lower head of the 2-headed inflorescence.

Gray Herbarium.

SOME VARIETIES AND FORMS OF CONNECTICUT PLANTS.

E. H. Eames.

Leersia oryzoides (L.) Sw., forma **clandestina,** n. f., paniculis et terminalibus et lateralibus intra vaginas omnino inclusis; ceteris formae typicae similis.

Terminal as well as lateral panicles wholly included in the sheaths; otherwise like the typical form of the species.— Flooded margin of a peat-bog, Stratford, Connecticut, 6 October, 1901, *E. H. Eames*, no. 600.

Usually very slender, simple, attaining a length of about 1 m. This form was the only representative of the species at this station, where it was plentiful.

Spiranthes **Beckii** × **gracilis,** n. hyb. Lip very white with its throat tinted pale greenish yellow and, like other floral parts, intermediate in size between those of the parent-species. Roots commonly two, whiter than those of gracilis and more like those of Beckii in shape.— Found plentiful with the parent-species in a field at Bridgeport, Connecticut, 18 August, 1895, by *I. F. Moore.* No. 1362 in herbarium of E. H. Eames. Readily recognizable in life.

Sium cicutaefolium Schrank, var. **Carsonii** (Durand), n. comb. (*S. Carsonii* Durand, A. Gray, Man. ed. 5, 196. 1867).

This plant is so readily recognizable as a rule, that it should bear a name in keeping with its very apparent affinities. In the southwestern part of Connecticut it is not rare, being, in fact, sometimes sufficiently abundant to choke small streams.

Sambucus racemosa L., forma **chrysocarpa** Eames & Godfrey, n. f., drupis flavis.

Fruit yellow.— Rocky slopes of Quonnipaug Mountain, Guilford, Connecticut, 4 July, 1914, *E. H. Eames & C. C. Godfrey*, no. 8795. Fruiting freely, the ample panicles presenting a rich color effect.

Coreopsis pubescens Ell., var. **robusta** Gray in herb., caule ramisque glabris vel glabratis, foliis glabris primariis 8–12 cm. longis 2–4.5 cm. latis.

Stem and branches glabrous or glabrate; leaves glabrous, the primary 8–12 cm. long, 2–4.5 cm. wide.— Mountains of Virginia, Kentucky and North Carolina; adventive in Connecticut. Virginia: July, 1841, *Gray & Carey.* Kentucky: river-bank, Cumberland Falls, Whitley County, August 23, 1883, *J. Donnell Smith.* North Carolina: North Branch of New River, July, 1841, *Gray & Carey* (type in Gray Herb.); slopes of Cedar Cliff Mountain, Bun-

combe County, August 2, 1897, *Biltmore Herb.* no. 307[e]. CONNECTICUT: waste grounds, Bridgeport, July 21, 1914, *E. H. Eames*, no. 8825.

BRIDGEPORT, CONNECTICUT.

MONTIA SIBIRICA IN MASSACHUSETTS.— While at Manchester, Massachusetts, in July, 1916, I noticed close to the verandah of the house where I was stopping a plant which I had never seen before. Not being able to trace it in Gray's Manual, I sent specimens to Prof. B. L. Robinson who informed me that it was *Montia sibirica* (L.) Howell, a Pacific Coast species not known on our eastern coast. A brief note on its occurrence here may be of interest.

There were fifty or more plants growing on soil kept damp by the drippings from the roof of the verandah. They were associated with *Stellaria media* and *Ranunculus repens* under a group of *Berberis vulgaris* round which twined *Smilax herbacea*. At first sight the plant reminded me of some of the *Caryophyllaceae* but it was marked by the cauline leaves of which there was a single pair on each stem, sessile, broadly cordate at the base and somewhat acute at the apex while the radical leaves, usually only one, were long-petioled and narrowly lanceolate.

The locality, Smith's Point, near Lobster Cove, Manchester, is a region covered by the estates of summer residents noted for their large and beautiful gardens. Since plants from the Pacific Coast are grown in large quantities it is probable that Montia was introduced with them directly or since, as Prof. Robinson informs me, the species has been introduced in certain localities in Europe, it may have reached our coast from the East. In the case of fungi it is not infrequently the fact that Pacific species reach our eastern coast by way of Europe. The hollyhock fungi is a well known instance.— W. G. FARLOW, Cambridge, Massachusetts.

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